### STATE OF IOWA

## DEPARTMENT OF COMMERCE

### **UTILITIES BOARD**

IN RE:	DOCKET NO. WRU-99-15-151
IES UTILITIES INC.	

### ORDER GRANTING WAIVER

(Issued June 9, 1999)

On April 19, 1999, IES Utilities Inc. (IES) filed with the Utilities Board (Board) a request for waiver of IOWA ADMIN. CODE 199-10.12(1)"b" and 19.5(2)"a"(2) (1999). Paragraph 10.12(1)"b" and subparagraph 19.5(2)"a"(2) incorporate by reference 49 C.F.R. Part 192.150. Part 192.150 sets forth federal safety standards requiring each new transmission pipeline and any line section of an existing transmission line where the line pipe, valve, fitting, or other line component is replaced to be designed and constructed to accommodate the passage of internal inspection devices, commonly known as "smart pigs." The Utilities Division, as a participant in the pipeline safety program under certification pursuant to 49 U.S.C. § 60105 (1999) and IOWA CODE § 479.33 (1999), is required to adopt federal pipeline safety regulations.

In support of the request for waiver, IES stated it has a permitted transmission line, known as the Villisca-Clarinda Lateral. The pipeline, constructed in 1955, consists of 14 miles of 6-inch and 13 miles of 4-inch diameter steel pipeline. The pipeline operates at 500 pounds per square inch gauge pressure and serves approximately 2,700 customers in the communities of Villisca, Hepburn, and

Clarinda. A recent survey revealed the following nine shallow or exposed areas: two areas at creek crossings, two areas at drainage ditches, two areas at road ditches, and three areas in farm fields. At one field location, the pipeline had been hit by a plow and is marked to prevent further hazard. IES would like to lower the pipeline at those locations to a safer depth. Since the pipeline is the sole source of gas supply for the three communities, IES asserts that the method used to repair the pipeline should not interrupt gas service.

IES investigated several alternatives for mitigating the shallow pipe. The first option would be to add dirt over the shallow sections. However, IES contends the method would only provide a temporary fix in tillable areas and would be unacceptable in drainage or ditch areas as it would dam up the flow of water. The second option would be to lower the existing pipe by digging out underneath the pipe and letting it sag into the deepened trench under its own weight. IES maintains this option would not be a suitable solution from a safety standpoint due to the additional stress placed on welded joints in a pipeline that was constructed "pre-code." The third option would be to install a new pipe section and remove the existing section as proposed, replace the removed section with a new lower pipe section, and then remove the bypass line IES had installed. However, this option would result in a near duplication of work on each section and would double the cost of the project.

IES proposed a fourth alternative, which would be to correct the nine shallow pipeline sections by replacing them with new pipeline sections installed at a lower depth, then removing the existing sections. The pipe sections to be replaced range

in length from 100.5 feet to 1,100.33 feet. IES would use "bottom-out" fittings to connect the replacement pipe to the existing pipeline. Through a series of operations, the fittings would allow introduction of gas to the new pipe while cutting off flow through the old pipe without taking the pipeline out of service. However, the fittings and the replacement pipe between the fittings would create a 90-degree bend in the pipe that could not be traversed by an internal inspection device. Therefore, a waiver of rules is necessary before this alternative could be pursued.

IES previously used the bottom-out fitting method to replace other sections of shallow pipe. IES records show 12 of the fittings were installed between 1980 and 1993. There are already at least three "plug" valves through which a smart pig cannot pass. In addition, a pig cannot make the transition from a six-inch to a four-inch pipe at Villisca. IES states that these reasons, coupled with the likelihood of other restrictive fittings in which the locations cannot be verified, decreases the chance of successfully utilizing an internal inspection device on any significant portion of the line in the future. IES asserts that any additional revisions to make the entire line capable of accommodating internal inspection devices would be impractical and expensive.

Since the Villisca-Clarinda Lateral contains numerous internal obstructions that would prevent the passage of instrumented internal inspection devices, it would be impractical to design and construct the nine repair sections in the Villisca-Clarinda Lateral to accommodate the passage of instrumented internal inspection devices.

Under these circumstances, the Board finds waiver of IOWA ADMIN. CODE 199-

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10.12(1)"b" and 19.5(2)"a"(2) (1999) appropriate and not inconsistent with pipeline safety.

Although the Board has authority to waive compliance with a federal safety standard, the waiver is subject to review by the Office of Pipeline Safety (OPS). The Board will submit a copy of its order to OPS pursuant to 49 C.F.R. Part 190.9. OPS has ten days from the date of receipt of the order to object to the Board's decision. Therefore, IES' request for waiver of IOWA ADMIN. CODE 199-10.12(1)"b" and 19.5(2)"a"(2) (1999) will be effective subject to review by the OPS.

# IT IS THEREFORE ORDERED:

Dated at Des Moines, Iowa, this 9<sup>th</sup> day of June, 1999.

The request for waiver filed by IES Utilities Inc. on April 19, 1999, is granted to the extent discussed in the body of this order and effective subject to review by the Office of Pipeline Safety.

# /s/ Allan T. Thoms /s/ Susan J. Frye ATTEST: /s/ Raymond K. Vawter, Jr. Executive Secretary